Abstract

Methods and apparatus for performing admission control and bandwidth allocation from a centralized network location in a communications system which supports various IP based services are described. Admission control is performed based on user interaction with a Web interface hosted by a centralized control. Users may subscribe/unsubscribe to premium (e.g., high bandwidth) services. Admission control to the premium services is controlled by the centralized control. The control interfaces with a gateway (edge) router which implements service decisions. The centralized control maintains a database of the users, links in the network, network elements, and estimates of allocated/free bandwidth on the links. In some embodiments, traffic, not under centralized control, e.g., from business switches and/or legacy gateway routers may be injected onto the network links. Load estimation methods are used to account for bandwidth consumed on the links by this injected traffic.